customers receive discounted cellular equipment or airtime usage credits. Under its previous accounting method, all such costs were deferred and amortized over the life of the related non-cancelable cellular telephone service agreement. Under the new accounting method, the costs are expensed as incurred.

(c) EBITDA represents earnings from continuing operations before interest expense, income taxes, depreciation and amortization. EBITDA is provided because it is a measure commonly used in the industry. EBITDA is not a measurement of financial performance under generally accepted accounting principles and should not be considered an alternative to net income as a measure of performance or to cash flow as a measure of liquidity.

(d) Earnings were insufficient to cover fixed charges by $36.3 million and $2.2 million for the three months ended March 31, 1997 and 1996, respectively, and by $56.2 million for the year ended December 31, 1996. Earnings consist of income before income taxes, plus fixed charges, except where capitalized. Fixed charges consist of interest charges and amortization of debt issuance costs, in each case whether expensed or capitalized, and the portion of rent expense under operating leases representing interest.

(e) Cellular subscribers at end of period include 14,216, 20,288, 25,456, 21,320 and 26,486 subscribers in the State of Maine for the years ended December 31, 1994, 1995 and 1996 and for the three months ended March 31, 1996 and 1997, respectively. See "The Maine Disposition."

(f) Net Population Equivalents means the estimated population of the license market area multiplied by the percentage ownership of the license. The estimated population is based on the 1996 Paul Kagan Associates, Inc. Cellular/PCS POP Book. The Company owns 100% of each of its PCS licenses and 100% of each of its cellular licenses. For the years ended December 31, 1994, 1995 and 1996 and the three months ended March 31, 1996 and 1997, Net Cellular Population Equivalents include 441,900, 442,000, 442,200, 442,000 and 442,200 population equivalents, respectively, from the Company's Maine market areas. See "The Maine Disposition."

Appendix 5: Articles on Diminishing Spectrum Values

WALL STREET JOURNAL.

★★★ TUESDAY, JUNE 3, 1997 INTERNET ADDRESS: http://wsj.com

Dollar Days

Sale of FCC Licenses In Several States Nets Budget Pocket Change

Public Airwaves Went Cheap After Congress Pushed Agency for Fast Auctions

McLeod Bags Four for $4

By BRYAN GRULEY
Staff Reporter of THE WALL STREET JOURNAL

CEDAR RAPIDS, Iowa – Clark McLeod loves grabbing a cheap cafeteria lunch at his company's new headquarters here. One recent afternoon, he paid only $4.80 for a generous slice of cheese pizza, a barbecued-beef sandwich and coffee.

But Mr. McLeod got an even better deal in April when he bought government licenses to use the public airwaves. In a Federal Communications Commission auction, McLeodUSA Inc. was the high bidder for licenses to offer wireless communications to 15 million people in four states.


Clark McLeod

The price: Four bucks.

That's right. McLeodUSA paid $1 for each license giving it permission to serve most of Iowa, Wisconsin, Minnesota and Nebraska. The licenses will play their part in Mr. McLeod's big plan to sell bundled local and long-distance telephone, cellular, paging and Internet services across the upper Midwest. Bryce Nemitz, a company vice president, deadpans: "Our CFO guaranteed we could double our money."

McLeodUSA's good fortune is now the subject of spirited debate in Washington, with policymakers torn between the dueling goals of fostering competition in telecommunications and balancing the federal budget. While no one doubts Mr. McLeod will fuel competition – he sold his first company to MCI Communications Corp. for $1.25 billion – they profess shock and dismay that anyone could buy an FCC wireless license for less than the price of a gallon of gasoline.

Thirteen prior FCC auctions of rights to use electromagnetic spectrum garnered $23 billion in bids for 4,249 licenses – or about $5.4 million a license. Winners have poured more than $10 billion into the U.S. Treasury, with more to come.

But the latest auction looks more like a fire sale. Congressional budgeteers expected it to fetch $1.8 billion, but bidders offered just $13.6 million for 128 licenses – a measly average of $106,000 apiece. Bargains abounded. BellSouth Corp., the Atlanta-based Baby Bell, snagged licenses for Kentucky, Tennessee and the Carolinas for just $1,002 each. And, like McLeodUSA, two other companies paid $1 each for other Missouri, Minnesota and Wisconsin licenses.

Budget Hole

"It was just a comedy of errors," complains John McCain, the Arizona Republican who chairs the Senate Commerce Committee.

Congress hurried the auction because it wanted to plug a hole in the budget. This meant potential bidders didn't have time to develop business plans and line up financing. Telecommunications-equipment makers weren't sure what to build or what to spend, because the FCC didn't designate the spectrum for a particular use. Mr. McLeod and other lucky bidders took advantage.

For decades the FCC parceled out spectrum via "comparative" hearings that took years and at lotteries that handed winners free licenses that they frequently resold for windfall profits. But in 1993 lawmakers decided auctions would deliver spectrum to worthy competitors more quickly, while raising more money for the government.

Now critics contend so much spectrum has been shopped that its market value is falling, and they say future auctions could reap fewer and fewer deficit-cutting dollars. That could be a problem because the balanced-budget deal cut by Congress and the Clinton administration expects spectrum auctions to raise $26.3 billion over the next five years.

Television broadcasters, worried because the budget deal also targets some of their existing spectrum for auction, are telling lawmakers that auctions have run their course. (Separately, broadcasters recently were awarded free licenses to beam digital signals – a move ordered by Congress and blessed by many lawmakers, Sen. McCain excluded, who now complain the latest auction raised too little cash.)

'Create Scarcity'

Cellular-phone-service companies that won in prior auctions complain that falling prices have devalued their licenses. This makes it harder for them to raise capital for their wireless systems, which in turn delays competition, they say. They want Congress to have the FCC allot spectrum more slowly.

At a recent Washington soiree, Mimi Dawson, a lobbyist for Motorola Inc., the big wireless-communications company, flashed her diamond ring and said, "You see this? It wouldn't be worth a dime if DeBeers [the South African cartel] put their diamonds on the market the same way we're putting spectrum on the mar-

Please Turn to Page A10, Column 1

Sale of FCC Licenses Nets Pocket Change

Continued From First Page

set." In an interview, she adds: "If you want to create value, you've got to create scarcity."

Sen. McCain and other lawmakers agree, and they are preparing legislation requiring the FCC to set minimum bids and limit the number of auctions held in a given time period. (Separately, the FCC and the Justice Department are investigating that and other auctions for possible illegal bid-signaling. McLeodUSA is one of many bidders to receive Justice Department requests for information. The company denies any wrongdoing.) Congress isn't likely to overturn the last auction, but in the future, "we've got to maximize the value of this public asset," Sen. McCain says.

But FCC Chairman Reed Hundt contends limiting auctions would also limit competition. He says the cellular industry wants to slow down auctions because "it's not an industry that loves seeing more competitors." And he argues that money generated by auctions is less important than the fact that more than 570 licensees have permission to offer new services at lower prices. "McLeod's license is a cheap ticket to ride the information highway," Mr. Hundt says. "He'll hire people, he'll pay taxes, he'll create an entrepreneurial venture. What's not to like?"

Nothing at all, if you ask Mr. McLeod. "What an exciting time," says the 50-year-old executive, striding through his headquarters at a pace just short of a jog. With the company payroll rising sixfold to 2,400 workers in the past two years, employees have been tripping up in cramped offices scattered throughout 11 buildings in downtown Cedar Rapids.

Now, amid stacks of boxes and the smell of fresh paint, about 1,000 are moving into a new complex that sprawls across a former cornfield outside town. It boasts its own post office and health club, and an acre-sized room of office cubicles marked with color-coded, made-up street addresses. Mr. McLeod's office, with a desk he bought at J.C. Penney in 1985, is at the corner of 11th Avenue and 11th Street. But he says, "I feel like somebody picked me up and put me down in heaven."

He has been there before. In 1980, the former high-school teacher and two pals started a company that became Telecom★USA, the nation's fourth-largest long-distance carrier. When long-distance giant MCI bought it in 1990, Mr. McLeod walked away with $50 million. "Once you taste that kind of accomplishment," he says, "you want to taste it again."

Having mastered long-distance service, he decided to compete against entrenched local phone companies. Now reunited with seven executives who helped build Telecom★USA, he aims to create a "super regional" carrier offering one-stop phone service — bundling local, long distance, paging, Internet and other services — in 12 Midwestern states, focusing on small and midsize towns. "This is an area of the country the big guys could care less about," he says.

The "big guys" are U S West Inc., the Denver-based Baby Bell, and Ameritech Corp., the Chicago-based Bell. Mr. McLeod jokingly calls U S West "Dino," for dinosaur, and a drawing in Mr. Nemitz's office shows a long-necked dinosaur labeled "U S West" with its head stuck in its posterior. A spokeswoman for U S West says it's "just fine if competitors think of us that way; it means they'll be off guard."

McLeodUSA has yet to post an annual profit and last year had a loss of $22.3 million on revenue of $81 million. But Mr. McLeod says he is focusing on market share. He says the company has won customers on 27% of the business-telephone lines in Iowa markets it has invaded, and on 17% in the Illinois cities where it competes, chiefly by reselling service purchased at wholesale rates from U S West and Ameritech. Meantime, the company is building its own fiber-optic network, and Mr. McLeod predicts profits will flow once customers migrate to that system, perhaps by 1999. The plan was convincing enough to help McLeodUSA raise $1 billion in equity and debt last year.

Mr. McLeod's wireless strategy has come along more slowly. Three years ago he asked Keith Molof, a former Ameritech manager, to explore bidding in an FCC auction. Mr. Molof, 39, tracked a few auctions before entering one last August for licenses to provide "personal communications services," a new generation of wireless phone and paging services. The company spent $32.8 million, or about $5 for each of the 6.5 million people its 26 licenses let it reach.

Keith Molof

Meanwhile, a separate batch of spectrum suddenly became available. Last September, Congress was seeking fresh funds to complete the fiscal 1997 budget. After consulting the FCC, lawmakers ordered an auction of unused spectrum vaguely designated for "wireless communications services." The Congressional Budget Office predicted this would raise $1.8 billion — but to be counted in the budget, the money had to be in the Treasury by Sept. 30, 1997. So Congress told the FCC to auction the spectrum by April 15.

This gave the FCC about five months to write auction rules and decide what the spectrum could be used for, a process of debate and compromise with industry that normally takes a year or more. In February, the agency completed rules that let bidders use airwaves for almost everything, from high-speed Internet transmissions to wireless cable TV. Only mobile-phone service was limited, because of potential interference with another band of spectrum.

Cellular companies and telecommunications-equipment makers objected to the imprecise rules, saying they couldn't determine what types of equipment they ought to build or at what cost. Thomas Wheeler, president of the Cellular Telecommunications Industry Association, a lobbying group, says the FCC neglected its responsibility. "It's the free-market approach gone haywire," he says.

Chairman Hundt defends the FCC's hands-off approach. With more time, affected industries could have developed clearer plans, he says, but adds, "I don't think the government should tell industry how to use spectrum." The FCC chose not to set minimum bids for the auction, partly because officials thought it would discourage bidders and, contrary to Congress's orders, leave a lot of unauctioned licenses. Also, FCC officials say it would have been difficult to set minimums for licenses in dozens of different U.S. markets.

On Feb. 5, Michele Farquhar, then-chief of the FCC Wireless Bureau, warned lawmakers by letter that bidders "may not have had sufficient time . . . to achieve a successful auction." Mr. Hundt enlisted wireless-industry lobbyists, including Mr. Wheeler, to persuade Congress to delay the auction so bidders would have more time to prepare. But they declined, Mr. Wheeler says, because it already was too late to change Congress's mind.

Out in Iowa, Mr. McLeod was in a quandary. He thought the spectrum surely could be used for stationary local-phone service and perhaps for remote reading of utility meters. But suppliers couldn't predict with certainty the costs of equipment needed for this particular band of spectrum — leaving "a huge hole" in the business plan, Mr. Molof says.

Mr. McLeod figured other potential bidders faced the same problem, so licenses just might be a bargain. He decided to make a few modest bids. After paying $5 a potential customer in the previous auction, McLeodUSA now expected to pay no more than a penny a customer. "If the licenses were all but free," Mr. McLeod says, "we wanted access to them."

Shortly after 8 a.m. on April 15, Mr. Molof sat down at a fourth-floor computer at McLeodUSA's old downtown headquarters. He had wired the FCC a required good-faith payment of $3,005,000, although he really didn't expect to bid more than $150,000. Just before the computer dialed the FCC auction computer, a message told Mr. Molof his toll call would cost $2.30 a minute.

A grid appeared, listing cities and regions where licenses were available. Mr. Molof moved his cursor to "Milwaukee," and inserted the numeral "1" in the "bid amount" column — for $1. Twice the computer asked if he was sure; twice he answered "yes." He entered three more $1 bids and, by the time he logged off, the toll-call bill was about $30.

For the next week, Mr. Molof checked periodically to see if he needed to raise his bids. Instead, he found that rivals he had expected to bid were dropping out. When the FCC ended the auction April 25, no one had topped his $1 offers.

A beaming Mr. Molof burst into Mr. McLeod's office with the good news. "Four dollars for 15 million customers," he said. "Mission accomplished." They slapped high-fives and Mr. McLeod handed Mr. Molof four one-dollar bills. He is having them framed.

The company has yet to receive its formal licenses, but the FCC recently sent something else just as welcome: a refund of $3,004,996.

Prentiss Acquires a Development

DALLAS — **Prentiss Properties Trust** said it acquired a six-building industrial development in suburban Los Angeles for $17.3 million.

The real-estate investment trust said it plans to renovate and expand the property, which currently totals 460,705 square feet of rentable space.

Manufacturers Planning More Hires, Survey Says

By a WALL STREET JOURNAL *Staff Reporter*

CHICAGO — A new survey said more U.S. manufacturers plan to increase hiring this year, reflecting continued strength in the U.S. job market.

The study, by Grant Thornton LLP, Chicago, said 59% of U.S. manufacturers plan to add full-time, permanent production employees this year, up from 46% a year earlier. About 32% say they plan to keep full-time staff size the same, while 7% plan to cut payrolls.

The study polled executives from 257 U.S. manufacturing companies with annual sales between $10 million and $500 million.

"Under present economic conditions, manufacturers are increasing capacity and hiring new workers," said Martin E. Cooperman, director of Grant Thornton's manufacturing/distribution group.

The survey found that 71% of executives say they're "optimistic" about the U.S. economy, while 3% say they're pessimistic and 26% are uncertain. Nearly 75% of manufacturers said profits for 1997 will rise above last year's levels — up from 60% a year ago and 57% in April of 1995.

A smaller percentage, about 63%, said 1998 earnings would also exceed the prior year's levels.

Morgan Stanley, Dean Witter

NEW YORK — **Dean Witter, Discover & Co.** and **Morgan Stanley Group Inc.** said yesterday that they have completed their **$10.2 billion merger.**

The stock of the combined firm, which will be known as **Morgan Stanley, Dean Witter, Discover & Co.**, started trading yesterday under the symbol "MWD."

Morgan Stanley Group and Dean Witter, Discover announced in February that they planned to merge, creating the biggest securities firm in terms of market capitalization.

Separately, Standard & Poor's Corp. said it has raised the long-term senior debt ratings of the former Dean Witter, Discover to single-A-plus from single-A. At the same time, S&P affirmed the single-A-plus long-term senior debt ratings of the former Morgan Stanley.

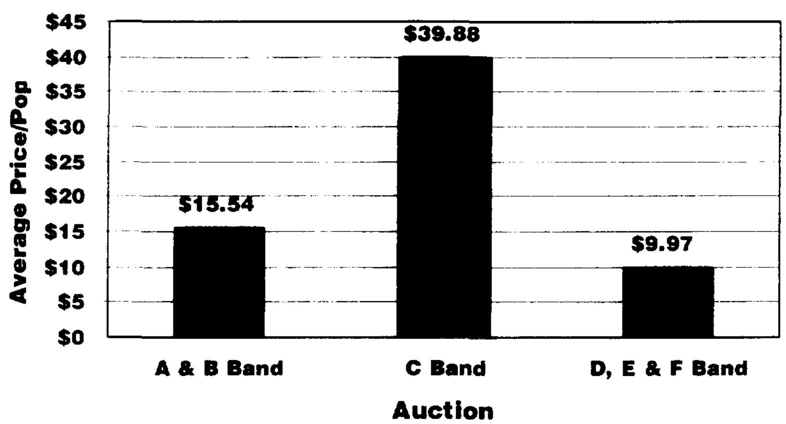
U.S. Telecommunications

D/E/F Band PCS Auction Results In Lower Spectrum Prices But Another Win For CDMA Proponents

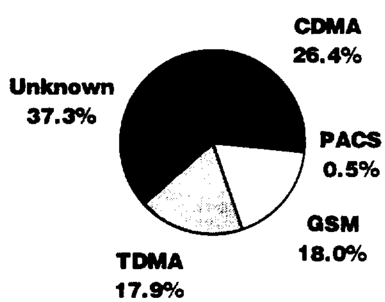
January 28, 1997

The FCC's auction of the last three personal communications services licenses ended on January 14, 1996. In this report, we provide an analysis of the outcome of the auction. In our view, four developments with broad implications for operators and equipment providers bear mentioning.

1. Spectrum Prices 75% Lower Than C Band Auction



2. CDMA Again The Big Winner—Buy Lucent Technologies



3. Sprint and AT&T Gain National Coverage—Both Rated Hold

4. GSM Proponents Can Now Claim National Coverage

Barry M. Sine, CFA (212) 224-8511
John C. Baylis (212) 224-8049
Parker Brophy (212) 212-8357
Dolores J. Daly (212) 224-5810

D/E/F Bands Personal Communications Services Auction Produces $2.5 Billion or $10 Per Pop

The Federal Communications Commission (FCC) completed its auction of the last three blocks of personal communications services licenses when the auction for the D, E and F band licenses ended on January 14 after 276 rounds. The FCC raised just over $2.5 billion in the auction, which works out to $9.97 per 30 MHz pop for all three licenses. Since these licenses only allow the use of 10 MHz of radio spectrum, versus 30 MHz for the A, B and C band licenses, we adjust this to arrive at a price per 30 MHz pop.

Spectrum Prices Drop 75% From C Band Auction in May

The gold rush atmosphere that pervaded the C band auction which ended in May, 1996 did not carry over to the D/E/F bands auction, with the price per 30 MHz equivalent pop falling 75% from the $40 paid by the small company participants in the C band, to only $10 in the D/E/F bands auction. This is also down roughly 35% from the A and B band auction held in 1995, which was dominated by the major U.S. telecom carriers. We see two factors behind the crash in the market for radio spectrum:

- First, most of the major U.S. telecom carriers that wanted a wireless telephony license either already held one of the two cellular licenses in their markets, or had successfully bid for licenses in the A/B bands auction. As we note later, in the few markets where two or more major telecom operators did actively compete, license prices reached record highs.

- Second, we believe that the difficulty many of the C band auction winners had in raising financing has diminished the appeal of the business to others that fear they may not have access to the capital markets if they did win licenses. By our count, C band participants have filed with the SEC for offerings to raise over $700 million in equity and $700 million in debt. Despite the fact that some of these companies initially filed last summer, none have yet to successfully raise any public capital.

C Band Winners Have Yet To Raise Public Capital

	Proposed Ticker	Initial Filing Date	Equity (mils)	Debt (mils)
NextWave Telecom	SURF	6/10/96	$300.00	$400.00
General Wireless	GWIR	6/28/96	$189.75	$220.00
Pocket Communications		8/29/96	$172.50	N/A
Chase Telecom	CTEL	10/2/96	$80.50	$105.00
Total			**$742.75**	**$725.00**

Source: Securities and Exchange Commission and SBC Warburg Inc.

The Wireless Communications Industry

Spring 1997

Dennis Leibowitz
Eric Buck
Timothy Weller
Eric S. Weinstein

Donaldson, Lufkin & Jenrette

Donaldson, Lufkin & Jenrette Securities Corporation • 277 Park Avenue, New York, New York 10172

PERSONAL COMMUNICATIONS SERVICES (PCS)

D, E and F Auction Prices Surprisingly Low

The final auctions, the so-called D, E and F Blocks for broadband PCS were awarded on January 14 after 275 rounds of bidding, which had begun in August 1996. The ultimate price of $2.52 billion, net of the F Block discounts, for a record 1,479 licenses by 125 bidders amounted to only $3.32 per pop, substantially below the $27 per pop paid in the C Block last year, adjusting for the difference in spectrum—10 MHz versus 30-by tripling the latest bid numbers. (In other than the largest markets, 30 MHz is not often needed, so tripling is perhaps overstating the relative value). With $10.17 billion from the C Block and $7.73 billion for the A and B rounds,(or $15 per pop for 30 MHz wide area A and B licenses) the total bid at auction from all rounds was $20.42 billion (excluding narrowband paging, SMR and other auctions) assuming the government actually collects all the money. There is some concern—particularly with the C Block, which brought in the most, and where payments are due over time rather than all upfront—that some of the winners will ultimately default. Those licenses would presumably be put up for bid again, but in view of the much lower D, E and F round prices and time to market considerations, it is virtually certain that any rebids would be at substantially lower prices. In the recent bids, a 5% down payment was required January 23, with another 5% due when licenses are officially granted probably very shortly. The rules were changed somewhat this time in some ways to be more liberal—i.e., that only 25% of the licensed area population has to be built out in five years compared to 80% in the first awards; and in some ways to be more conservative—i.e., the discounts and payment terms for the F Block winners are less favorable. The F Block down payment is 20% instead of 10%, and the government loans are interest only for only two years, not six as with the C Block.

Of the bidders, one-third were new, and they included 70 led by minorities, 50 by women and 167 by rural companies, largely in the F Block. Among the more interesting new players was Sprint Corp. on its own rather than Sprint Spectrum, although the latter will manage the Sprint properties; U S WEST, which also bid at the corporate level, as opposed to via U S WEST New Vector; North Coast whose principal is related to Charles Dolan, CEO of cable company Cablevision Systems (North Coast bid in Cablevision Systems' cable markets as it had in the C Block) and Rivgam/Aer Force in which investor Mario Gabelli is a principal (Aer Force was a vehicle for the F rounds, which require small business status). It is also interesting that Omnipoint and Western Wireless (WWCA) ended up with 10 MHz each in certain markets where it is unlikely either would build alone, suggesting a partnership there. WWCA already has a partnership with Cook Inlet through which it bid in both the C and F rounds. In Sprint's case, the apparent reason for the stand-alone bid was that the company is more enthusiastic about PCS than its three cable partners (Tele-Communications, or TCI, Comcast and Cox); in fact, there has been recent publicity about TCI and Comcast's interest in getting out of the venture. With USW the likely ultimate merger and then sale of the New Vector properties into AirTouch, the telephone company will be removed from direct participation in wireless, particularly if U S WEST Media Group, now a tracking stock, is spun out to shareholders entirely, which we expect to happen.